

Lactation Accommodation at SIU

Laura Morthland, Chad Schwartz, and Deborah
Barnett | Southern Illinois University

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abstract

This presentation outlines a project undertaken by a multidisciplinary team of staff, faculty, and students at Southern Illinois University to provide a dedicated space for nursing mothers in the campus' Morris Library.

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design team

- faculty

Chad Schwartz, architecture

Jenny Huang, construction management

Laura Morthland, Interior design

- students

Shelby Orr, architecture

Caroline Simmons, architecture

Andrew Estabrook, construction management

Damian Smith, construction management

Sarah Barth, interior design

Zoey Koester, interior design

- clients

Deborah Barnett, non traditional student services

Susan Tulis, morris library

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need | Non-Traditional Student Services (NTSS) serves SIU Carbondale's adult student population through guidance, support, and resource referral to enhance educational experiences

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healthy people 2020

- high-quality, longer lives free of preventable disease, disability, injury, and premature death
- health equity, eliminate disparities, and improve the health of all groups
- social and physical environments that promote good health for all
- quality of life, healthy development, and healthy behaviors across all life stages

Center for Disease Control
http://www.cdc.gov/nchs/healthy_people/hp2020.htm

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need | mothers are the largest growing segment of the US labor force; approximately 70% of employed mothers work full time; 1/3 return to work within 3 months of giving birth, 2/3 return within 6 months (CDC, support for breastfeeding in the workplace)

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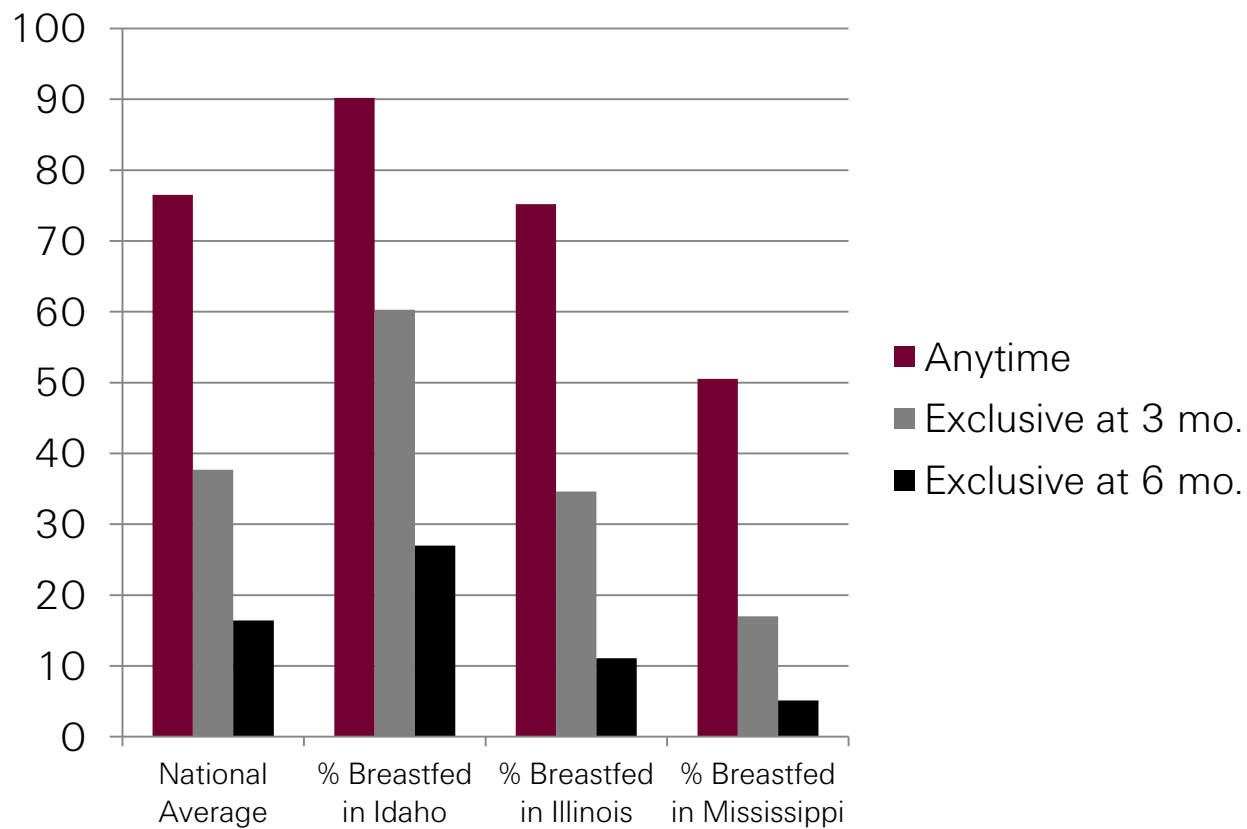
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CDC breastfeeding report card, 2013

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southern illinois university

- minimal support and resources available to nursing students and employees at SIUC
- no designated areas for lactation on the campus for nursing students; minimal for employees
- Jackson County WIC office reports many complaints from nursing student mothers about lack of areas for pumping on campus

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need | failing to provide the needed resources sends the message that motherhood is incompatible with educational or professional success

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provisions for employees

“...a place, other than a bathroom, that is shielded from view and free from intrusion from coworkers and the public, which may be used by an employee to express breast milk.”

U.S. Department of Labor

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need | SIU students have expressed that accommodations in centrally located places on campus such as the library, the student center and quigley hall would be ideal (image source: http://itday.siu.edu/_common/images/location-morris.jpg)

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service learning

Service can be defined as “contributions in and to the community that improve the quality of life for an individual, group, neighborhood, or for the entire community.”

Service-Learning Course Design Workbook
Howard, J. (2001). OCSL Press.

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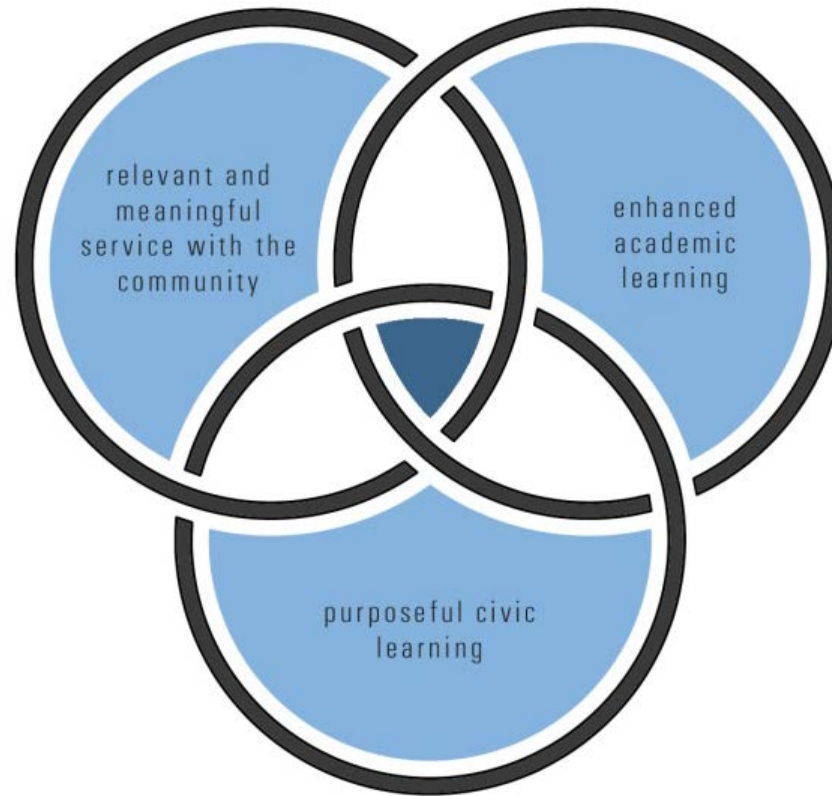
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pedagogy | academic service-learning requires that the service-learning component is a primary source of learning and education, not a secondary exercise

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course objectives

- architecture and design
 - construction documentation
 - communal work environment
 - principles, materials, means & methods of practice
- experiential learning
 - extract meaning & understanding from client interactions
 - apply design & technical information in a real world situation
- community learning
 - roles of the client, community, regulatory bodies & design team
- civic learning
 - develop & apply professional skills for the betterment of the regional community

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pedagogy | every member of the class must take an active role to ensure quality; professionalism, preparation, time management and self motivation are key

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professional studio model

“Students are supposedly being prepared for practice, but they are usually led to think of themselves as independent designers, which is a rare condition in real life...The larger, team-oriented form of practice is often poorly understood and sometimes denigrated, although it is now the dominant and most vital structure in the profession”

Observations for Young Architects
Pelli, C. (1999). Monacelli Press.

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professional | early design ideas for the Mother's Room were presented by the students; faculty participated as team members but the focus is on students as co-leaders of the process

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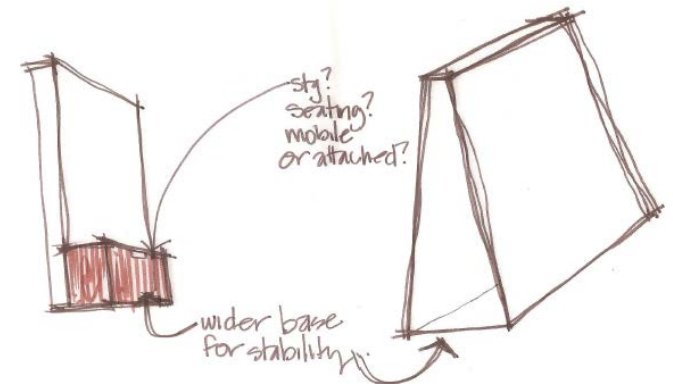
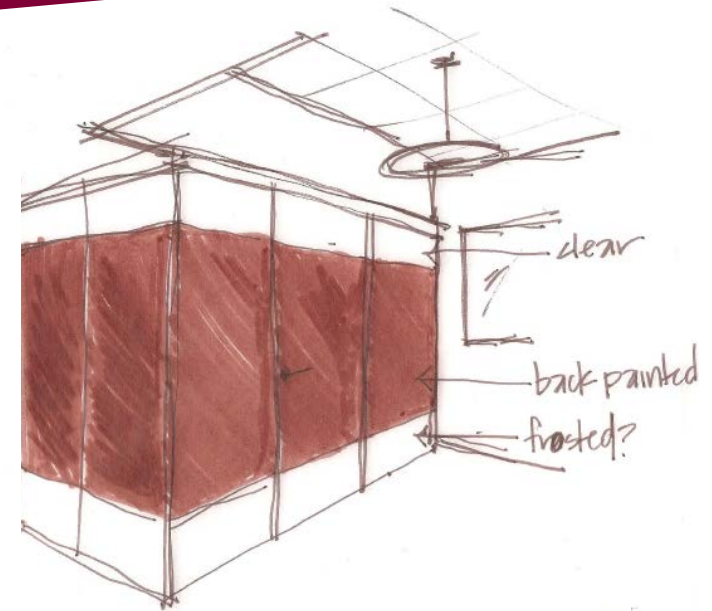
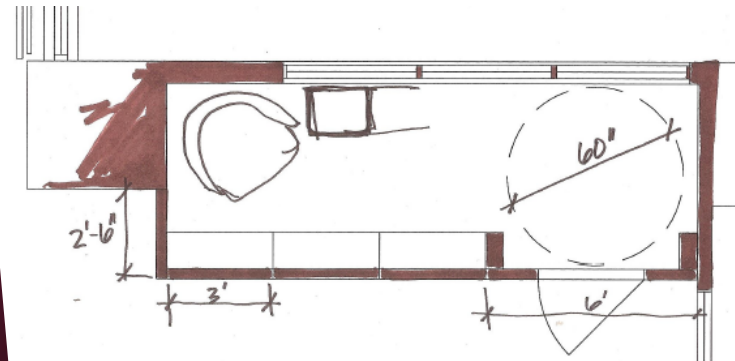
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professional | early design ideas were presented by all team members in loose format for group brainstorming and critique

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professional | leading client presentations
allowed students to apply skill and discipline
knowledge in service to the campus and regional
community

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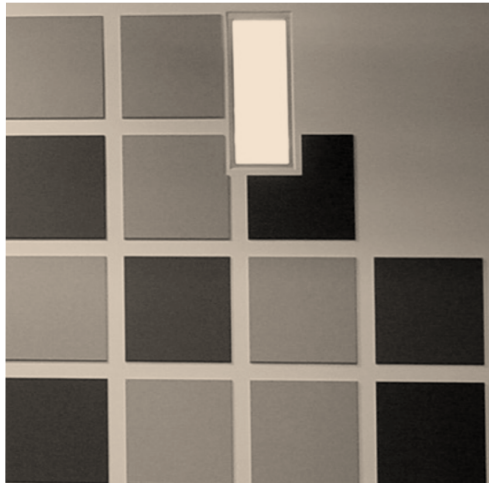
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professional | multiple schematic ideas were developed by student teams with faculty providing input; teams were multidisciplinary to maximize skills and knowledge

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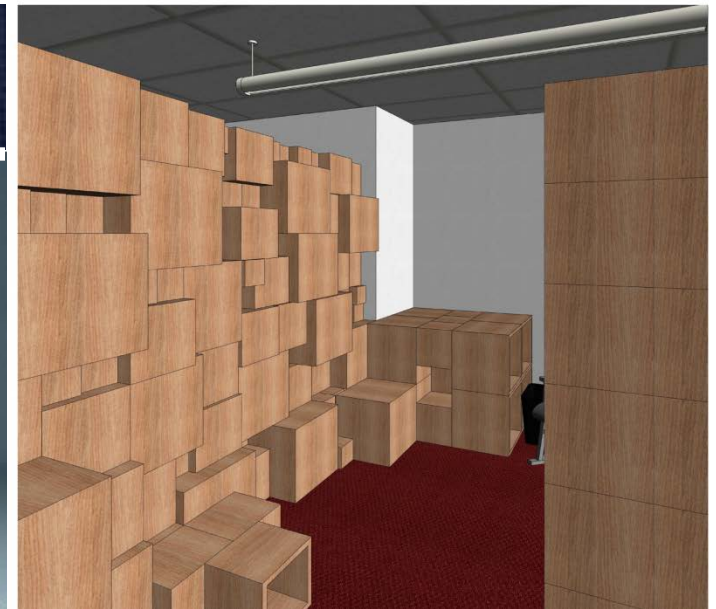
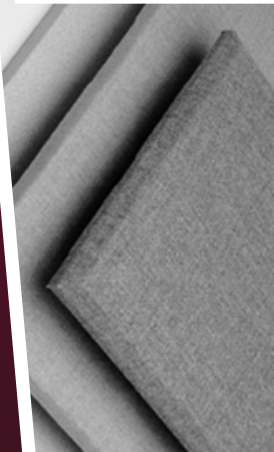
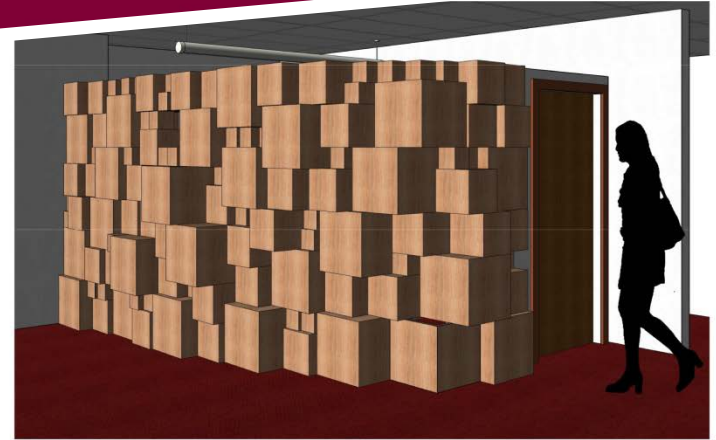
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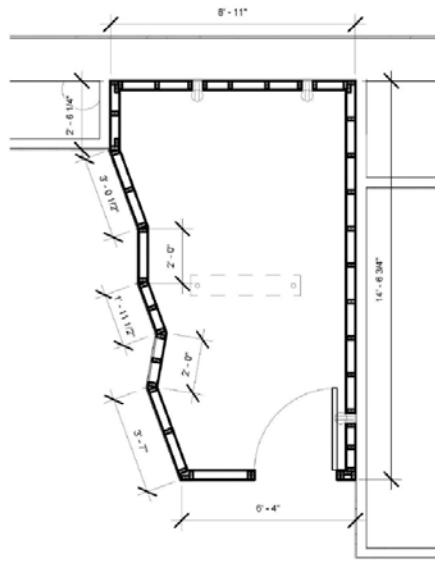
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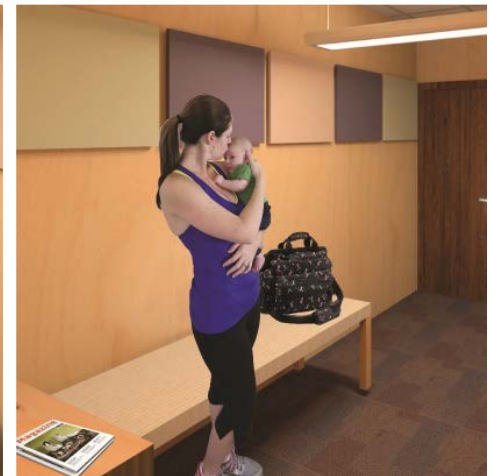
professional | incorporation of test panels and signage mock ups were brought into the process early on to enable the design details and fabrication methods to develop in tandem

professional
studio model



Category	Value
Labor	\$6,500,000
Interior	\$5,998,300
Frame/Siding	\$1,070,131
Door	\$1,076,112
HVAC	\$800,000
Insulation/Sealant	\$402,000

Electrical	\$ 430,000
750-Watt Generator	\$ 2,000
750-Watt Studio(P)	\$ 120,740
750-Watt Studio(P)	\$ 54,890
750-Watt Studio(D)	\$ 108,720
750-Watt Plaster(E)	\$ 50,880
Fasteners	\$ 400,000
Flah	\$ 25,920
MDF Core Plywood	\$ 289,900
Door Slab	\$ 21,000
Door Frame	\$ 125,000
Hardware	\$ 45,000
Mod to Ventilation System	\$ 800,000
Wall Insulation	\$ 158,112
Acoustic Membrane	\$ 95,000
Cadding	\$ 900,000
Interior Paint/Seal	\$ 500,000
Acoustic Panel Treatment	\$ 520,000
Custom Bench	\$ 300,000
Chair	\$ 303,200
Chair Ottoman	\$ 331,000
Coat Hooks	\$ 67,500
Tosh Can	\$ 80,000
Lamp	\$ 260,000
Light Switch	\$ 68,000
Contingency	\$ 800,000
Total	\$17,246,730



professional | refined design options were again lead by student teams; however, groupings were based on discipline (arc, cm, id) for greater application of skill

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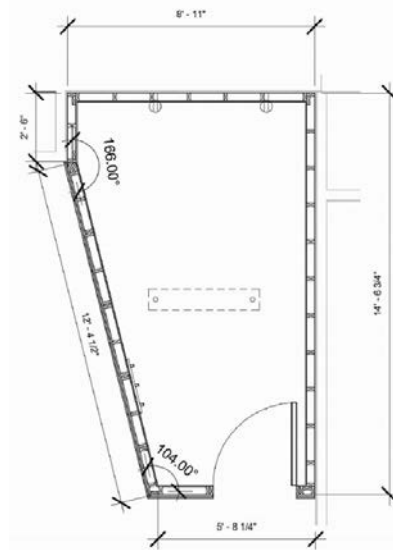
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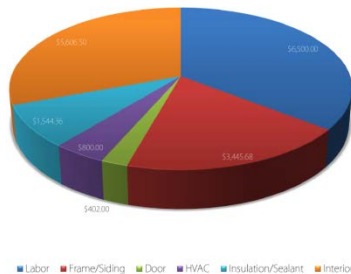
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Design 2 Total Cost: \$19,098.54



Electrical	\$ 4,300.00
Plumber	\$ 2,500.00
2x4-10 Siding (P)	\$ 129.74
2x4-10 Siding (P)	\$ 33.99
2x4-10 Siding (P)	\$ 61.80
2x4-10 Siding (P)	\$ 24.72
2x4-10 Siding (P)	\$ 2,440.52
Painters	\$ 400.00
Plumbers	\$ 300.00
Plaster	\$ 25.92
Plaster Core Plywood	\$ 28.99
Door Slab	\$ 212.00
Door Frame	\$ 125.00
Hardware	\$ 65.00
Wood to Vent. System	\$ 800.00
Wall Insulation	\$ 1,445.36
Acoustic Membrane	\$ 95.00
Cladding	\$ 900.00
Interior Paint/Stain	\$ 200.00
Floorboard	\$ 1,185.00
Custom Benches	\$ 500.00
Chair	\$ 3,052.00
Chair Outlet	\$ 351.00
Chair Holes	\$ 67.50
Flush Cans	\$ 80.00
Lamp	\$ 260.00
Light Switch	\$ 60.00
Contingency	\$ 800.00
Total	\$ 19,098.54



professional | refined design options were again lead by student teams; however, groupings were based on discipline (arc, cm, id) for greater application of skill

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professional | key campus community members, such as university architects, union carpenters, electricians, etc. were invited into the process early to ensure full coordination of the design and construction

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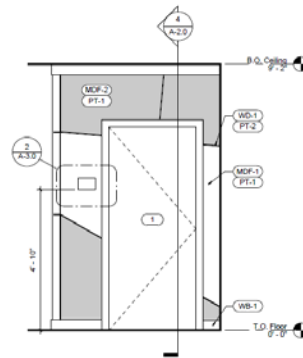
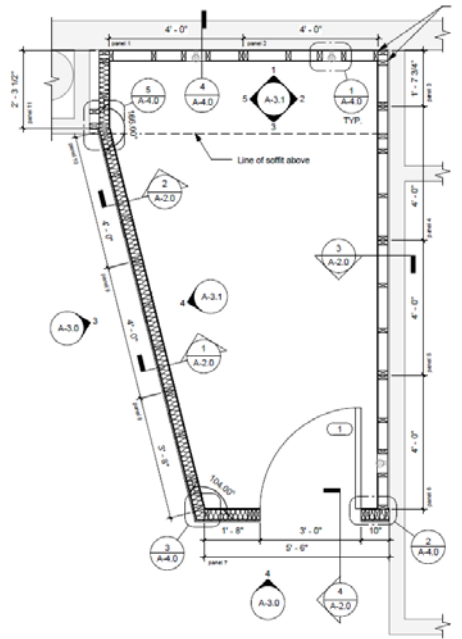
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professional | digital explorations, materiality, construction detailing; all are all informing the process and helping to refine the level of detail within the construction documents

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“In a 2013 report entitled *Architectural Education and Accreditation*, the Association of Collegiate Schools of Architecture [ACSA] recommended that the levels of engagement...should be raised and that students should be immersed in a learning environment that is responsive to the diverse and constantly changing...contemporary construction industry”

ACSA. (2013). Accreditation Review Conference.
as cited in: Building a Social Framework
Schwartz, C., Morthland, L. & McDonald S., (2014). Routledge.

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hands on learning | material type, fabrication method and finish level were all tested and strengths/weakness assessed by both faculty and students

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hands on learning | early on in the process the typical method of drywall construction was rejected due to the skill level needed to finish that construction type properly; instead the use of digital fabrication tools became a design focus

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hands on learning | full scale mock up construction revealed that framing technique and application of acoustic underlayment will be critical to achieving high final finish levels

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hands on learning | students and faculty work along side one another in shared work activities and collegial mentoring experiences vs. the traditional academic model

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hands on learning | students work with one another to transfer knowledge and skill and to expand awareness of the connection between design details and construction

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hands on learning | the design/build model is based on the connection of ideas, codes, client needs and wants, materiality, budget, construction techniques and design manufacturing

thank you

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SIU Sustainability

Deborah Barnett
Programs Coordinator
Non-Traditional Student Services

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Consultant
Food and Nutrition

Marie Funk
Graduate Student | Dietetic Intern
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Susan Tulis
Associate Dean
Morris Library

Carol LePere
Architect
Physical Plant Engineering Services

Mark Popejoy
Carpenter Forman
Physical Plant Engineering Services

Mike Maugan
Electrical Engineer
Physical Plant Engineering Services

Shawn Moore
Mechanical Engineer
Physical Plant Engineering Services



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